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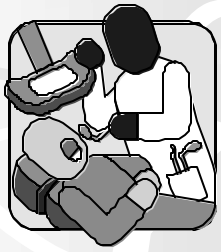

PHARMACOLOGY FOR NURSES GSN 0606

CLINICAL CORRELATION

CASE STUDY # 57
OBESSIVE-COMPULSIVE DISORDER

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LEARNING OBJECTIVES

- RECOGNIZE WHEN THE SYMPTOMS OF OBSESSIVE-COMPLUSIVE DISORDER (OCD) INTERFERES WITH AN INDIVIDUAL'S ACTIVITIES SUFFICIENTLY TO REQUIRE MEDICAL ATTENTION AND TX..
- RECOMMEND ALTERNATIVE TX OPTIONS FOR PATIENTS WITH OCD.

LEARNING OBJECTIVES (CONT)

- DEVELOP A TX PLAN FOR A PARTICULAR PATIENT TAKING INTO CONSIDERATION THE ADVERSE EFFECT PROFILE, COST, AND EFFICACY OF THE EFFECTIVE AGENTS.
- COUNSEL PATIENTS ON THE EXPECTED BENEFITS AND POSSIBLE ADVERSE EFFECTS OF DRUGS USED TO TREAT OCD.

OCD: EPIDEMIOLOGY

- **OCD IS APPROXIMATELY 50 TIMES MORE COMMON THAN PREVIOUSLY REPORTED BY SURVEYS CONDUTED USING CLINICAL POPULATIONS (OR PERSONS SEEKING TX).**
- **THERE IS LIFETIME PREVALENCE RATE OF 2.5% IN ADULTS & 1% IN CHILDREN**

EPIDEMIOLOGY (CONT)

- **OCD IS FOURTH MOST COMMON PSYCHIATRIC DISORDERS**
- **OCD USUALLY BEGINS IN LATE ADOLESCENCE OR EARLY CHILDHOOD, BUT MAY BEGAN IN CHILDHOOD.**
- **INCIDENCE IS > IN FEMALES THAN MALES, BUT AGE OF ONSET IS EARLIER IN MALES(6-15 yr. VS 20-29)**

EPIDEMIOLOGY (CONT)

- **OCD MAY HAVE A FAMILIAL COMPONENT.APRROX 10% OF FIRST DEGREE RELATIVES OF PATIENTS WITH OCD HAVE OCD.**
- **THE FAMILIAL & CLINICAL OVERLAP BETWEEN TIC DISORDERS (TOURETTE'S SYNDROME) & OCD IS WELL DOCUMENTED.**
- **STUDY OF ADOLESCENTS WITH TOURETTE'S, APPROX 40% OF INDIVIDUALS WERE DX WITH OCD**

PREDISPOSING FACTORS TO OCD

- **PSYCHOANALYTICAL THEORY**
- **LEARNING THEORY**
- **TRANSACTIONAL MODEL OF STRESS ADAPTATION**
- **<u>BIOLOGICAL ASPECTS</u>**

A. NEUROANATOMY

B. PHYSIOLOGY

C. *BIOCHEMICAL*

BIOLOGICAL ASPECTS

- **BIOCHEMICAL**

A NUMBER OF STUDIES HAVE IMPLICATED THE NEUROTRANS-MITTER SEROTONIN AS INFLUENTIAL IN THE ETIOLOGY OF OCD. THEREFORE, DRUGS USED TO BLOCK THE NEURONAL REUPTAKE OF SENOTONIN, THEREBY POTENTIATING SEROTONINERGIC ACTIVITY IN THE CENTRAL NERVOUS SYSTEM ARE USED FOR TX.

<u>CLASSIFICATION OF OCD</u>

- **ANXIETY DISORDER**

OCD DEFINED

- THE DSM-IV REQUIRES THE PRESENCE OF EITHER OBESSIONS & OR COMPLUSIONS THAT ARE SEVERE ENOUGH TO CAUSE :
- MARKED DISTRESS
- TO BE TIME CONSUMING(OCCUPY > 1 HR/DAY)
- TO CAUSE SIGNIFICANT IMPAIRMENT IN SOCIAL OR OCCUPATIONAL FUNCTIONINGS

OBESSIONS

- OBESSIONS ARE DEFINED AS UNWANTED , INTRUSIVE, PERSISTENT IDEAS, THOUGHTS, IMPULSES, OR IMAGES THAT CAUSE MARKED ANXIETY OR DISTRESS.

COMMON OBESSIONS

- THOUGHTS ABOUT CONTAMINATION (GERMS,DIRT,OR TOXIC CHEMICALS)
- REPEATED DOUBTS (WHETHER A DOOR WAS LEFTED UNLOCKED)

COMPLUSIONS

- **COMPULSIONS DENOTE UNWANTED REPETITIVE BEHAVIOR PATTERNS OR MENTAL ACTS THAT ARE INTENDED TO REDUCE ANXIETY, NOT TO PROVIDE PLEASURE OR GRATIFICATION.**

COMMON COMPULSIONS

- **HAND WASHING**
- **CLEANING**
- **COUNTING**
- **CHECKING**
- **REQUESTING OR DEMANDING ASSURANCES**
- **REPEATING WORDS SILENTLY**

PATIENT PRESENTATION

CHIEF COMPLAINT

"MY HANDS ARE SO DRY"

HISTORY OF PRESENT ILLNESS

Jerry Thomas is a 19 yo who was referred to the psychiatric clinic by a dermatologist whom he had previously seen for “flaking hands”. He states that his skin feels like a snake. Upon further questioning, he states that he washes his hands a minimum of 150 times a day. He states that it takes him 3 hrs to complete his shower. His shower routine is that he turns on the water,the water hits his body, and since his body is dirty he must turn off the water and

HPI(CONT)

scrub the shower, since the dirt from his body is now on the shower tiles. Once he cleans up the tiles, he turns on the shower again. Again the water hits him, dirt gets on the tiles, and he begins cleaning again.. He states that he has intrusive thoughts about dirt and germs, but he does not tell anyone because he knows the thoughts do not make sense. He states it takes 4 1/2 hrs each morning for him to leave the dorm. He has failed his first semester of college because his cleaning behaviors take 8to 9 hrs/day ,leaving him very little time to study. He states that his high school work was typically accomplished in minimal time compared to his

PATIENT PRESENTATION (CONT)

PMH :Non-contributory
FH: Father has a history of depression
SH :Freshman at a local junior college
Meds :None
ALL: NKA
ROS: Non-contributory except complaints noted above

PE:Wt 81.8 kg, Ht 185 cm
Skin: Dry, with some desquamation, mostly involving the hands.
Remainder of exam non-con tributory.
Labs: None were obtained

PROBLEM IDENTIFICATION

OBESSIONS:

- **SKIN FEELS LIKE A SNAKE**
- **INTRUSIVE THOUGHTS ABOUT DIRTY BODY & SHOWER TILES,GERMS**
- **HE KNOWS THE THOUGHTS DO NOT MAKE SENSE AND DO NOT TELL ANYONE**

PROBLEM IDENTIFICATION (CONT)

- **COMPULSIONS:**
- **WASHING HANDS 150 TIMES/DAY HAS RESULTED IN SEEKING CARE FOR "FLAKING HANDS"**
- **CLEANING BEHAVIOR TAKES 8-9 HRS/DAY . THIS DOES NOT LEAVE ADEQUATE TIME FOR STUDYING.**
- **FAILED FIRST SEMESTER DUE TO LACK OF TIME FOR STUDYING**
- **TAKES 41/2 HRS TO LEAVE DORM EACH MORNING**

DESIRED OUTCOME: GOALS OF TX FOR OCD IN THIS CASE?

MAJOR GOAL:

- **TO MINIMIZE SYMPTONS**
- **TO IMPROVE THE PATIENT SOCIAL FUNCTIONING**

THERAPEUTIC ALTERNATIVES:NON-PHARMACOLOGIC CHOICES

- **BEHAVIOR THERAPY: EXPOSURE THERAPY WITH RESPONSE PREVENTION IS THE MAINSTAY OF BEHAVIOR TX.(SHOULD INCLUDE @ LEAST 20 HRS OF ACTUAL EXPOSURE AND RESPONSE PREVENTION AS NECESSARY).**

NON-PHARMACOLOGIC CHOICES (CONT)

- **PSYCHOSURGERY OFFERS FAVIORABLE OUTCOME FOR PATIENTS WHO HAS SUFFERED FOR YEARS WITH DISABLING OCD (THE EFFICACY OF THIS SURGERY REMAINS UNPROVEN).**

PHARMACOTHERAPEUTIC CHOICES

- **FIRST -LINE PHARMACOTHERAPY SHOULD BE A TRAIL OF A 5-HT REUPTAKE INHIBITOR**
- **THEN A SECOND 5-HT REUPTAKE INHIBITOR, THEN THIRD SUCH AGENT IF NECESSARY**

PHARMACOTHERAPEUTIC (CONT)

- CLOMIPRAMINE (ANAFRANIL) 25MG/D INITIAL DOSE USUAL DOSE RANGE 100-250MG/D
- FLUOXETINE (PROZAC) 10-20MG/D INITIAL DOSE USUAL DOSE RANGE 10-80MG/D
- FLUVOXAMINE (LUVOX) 50MG/D INITIAL DOSE USUAL DOSE RANGE 50-300MG/D
- SERTRALINE (ZOLOFT) 50MG/D INITIAL DOSE USUAL DOSE RANGE 100-200MG/D

OPTIMAL PLAN

- CLOMIPRAMINE 25MG/D @ HS X 1 WEEK
- CLOMIPRAMINE 50MG/D @ HS X 1 WEEK
- CLOMIPRAMINE 100MG /D (50 @ BREAKFAST AND 50@DINNER)
- THEN CONTINUE TO INCREASE GRADUALLY TO 250MG/D FOR MAINTENANCE DOSE

ASSESSMENT PARAMETERS

- RETURN TO CLINIC WEEKLY THEN MONTHLY (10-12WKS)
- MONITER FOR TARGET SYMPTOMS RESPONSE (e.g., improvement in skin integrity, decreased time performing rituals)
- SYMPTOM SEVERITY MAY BE MONITERED USING THE YALE-BROWN OBESSIVE-COMPULSIVE SCALE (Y-BOCS)

ASSESSMENT (CONT)

- **MONITER PATIENT FOR ADVERSE EFFECTS OF CLOMIPRAMINE; DRY MOUTH,DIZZINESS,TREMOR,FATIGUE,SOMNOLENCE,CONSTIPATION,**
- **NAUSEA,WT.GAIN,SEXUAL DYSFUNCTION , SEIZURES, HEADACHE**
- **MONITER FOR EMERGENCE OF SUICIDAL IDEAS**
- **FEVER ,SORE THROAT**

SIDE EFFECTS (CONT)

- **MONITER FOR DRUG INTERACTIONS (i.e.,drugs having sedative or anti- cholinergic properties, MAOIs, antihypertensives, warfarin, & digoxin)**

LABS: WBC (with diff), PLASMA CONCENTRATION (ideal is between 100 &250ng/ml), & LEUKOCYTE

PATIENT COUNSELING

REGARDING DRUG THERAPY???

PATIENT COUNSELING

- **PATIENT WILL BE GIVEN CLEAR INSTRUCTIONS REGARDING DRUG THERAPY:**

  TIME TO TAKE MEDICATION(TAKE 1 TAB @HS FOR 1/WK, ETC. MED WILL BE INCREASED AND THEN BE TAKEN AT BREAKFAST AND DINNER. IT IS IMPORTANT TO TAKE WITH MEALS AS THE DOSAGE INCREASES IN ORDER TO PREVENT GI IRRITATION

COUNSELING (CONT)

- **NOTE THAT RESPONSE TO DRUG THERAPY WILL OCCUR SLOWLY AND SHOULD SEE IMPROVEMENT IN 4 WEEKS OF IMPLEMENTION**
- **COMPLIANCE TO DAILY DOSAGE IS IMPORTANT**

COUSELING(CONT)

- **DO NOT DOUBLE UP ON MED IF A DOSE IS FORGOTTEN**
- **DO NOT DISCONTINUE MED ABRUPTLY(MUST BE TAPERED)**

  (may cause withdrawal symptoms i.e., nausea, headache,vertigo,etc.)
- **REVIEW COMMON SIDE EFFECTS & WHAT TO DO IF FEVER OR SORE THROAT DEVELOPS**

COUNSELING (CONT)

- USE SUNSCREENS & WEAR PROTECTIVE CLOTHING WHEN SPENDING TIME OUTDOORS TO PROTECT FROM SUNBURN (WITH TRICYCLICS)
- AVOID SMOKING BECAUSE IT INCREASES THE METABOLISM OF TRICYCLICS
- CARRY A CARD OR OTHER TYPE OF IDENTIFICATION DESCRIBING THE MEDICATION BEING TAKEN

CLINICAL COURSE

ONE MONTH AFTER BEING STARTED ON TX, THE PATIENT RETURNS FOR A FOLLOW-UP VISIT. HE REPORTS THAT HE IS TAKING HIS MEDICATION AS DIRECTED AND ATTENDING BEHAVIORAL THERAPY SESSIONS. UPON QUESTIONING, HE REPORTS THAT HE OCCASIONALLY HAS HEADACHES. HE STATES THAT HE HAS NOTICED SOME IMPROVEMENT; IT NOW TAKES HIM THREE HOURS TO LEAVE THE HOUSE IN THE MORNING.

FOLLOW -UP CASE QUESTION

WHAT IS YOUR ASSESSMENT OF THE PATIENT'S RESPONSE TO THE INTERVENTIONS???

PATIENT'S RESPONSE TO THERAPY

PT. IS RESPONDING TO CLOMIPRAMINE HAVING A REDUCTION IN SYMPTOMS. ALTHOUGH IT IS <50%, HE IS STILL SHOWING PROGRESS WHICH IS GOOD . STUDIES SHOW THAT A PATIENT SHOWING PARTIAL RESPONSE AFTER 4 WEEKS OF TX , MAY IMPROVE CONSIDERABLY IF TX IS CONTINUED FOR SEVERAL MORE WEEKS. THE OCCASIONAL HEADACHES THAT PATIENT IS EXPERIENCING IS A NORMAL SIDE EFFECT OF CLOMIPRAMINE.

SELF STUDY ASSIGNMENT

THE LITERATURE SUPPORTS THAT THE BENEFITS OF BEHAVIOR THERAPY THAT ACCOMPANIES PHARMACOTHERAPY MAY NOT ONLY INCREASE THE EXTENT OF SYMPTOMS REDUCTION, BUT MAY ALSO ENHANCE THE PERSISTENCE OF IMPROVEMENT AFTER DRUG THERAPY IS DISCONTINUED.

SELF STUDY (CONT)

- THE LITERATURE ALSO SUGGESTS THAT SOME PATIENTS WITH COMPULSIVE RITUALS RESPOND COMPLETELY TO EITHER DRUGS OR BEHAVIOR THERAPY ALONE. BEHAVIOR THERAPY HAS LITTLE TO OFFER THE PATIENT WITH SEVERE OBESSIONS WHO DOES NOT HAVE COMPULSIONS.

COMPARISION OF COST FOR OCD DRUGS (1 MONTH)

DRUG	DOSE	EACH	30 DAY
CL OMIPRAMINE	25MG /D	.6.5	$2.25
(ANAFRANIL)	50MG /D	.10	$3.00
100-250MG/D	75MG/D	.20	$6.00
FLUOXETINE	10MG/D	.57	$14.25
(PROZAC)	20MG/D	1.15	$28.75
20-80MG/D			
FLUVOZAMINE	25MG	1.09	$27.25
(LUVOX)	50MG/D	1.31	$32.95
100-300MG/D	100MG/D	1.32	$33.00

QUESTIONS????

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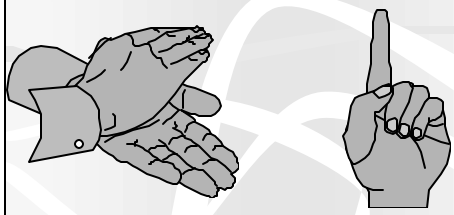

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